Ref. AR

(Japanese patent application laid open No. H04-077327)

Brief Description of the Drawings

Fig. 1 is a schematic diagram showing the step of manufacturing a soot body by a VAD method.

Fig. 2 is a schematic diagram illustrating the heating step by burning furnace.

Fig. 3 is a schematic diagram illustrating the heating step when a zone furnace is used.

Fig. 4 shows fiber loss wavelength characteristics in accordance with the present invention obtained by embodiment 2.

Reference Numerals

1--- burner, 2--- flame, 3--- rod, 4--- soot body, 5--- heater, 6--- furnace cardiac tube, 7--- atmospheric gas inlet, 10--- transmission loss, 11--- wavelength

Claims

"(1) A method of manufacturing an optical fiber wherein a silica-based porous base material is made into an optical fiber base material by dehydrating said silica-based porous base material and converting it into transparent glass, the method comprising the step of:

adding sulfur to said porous base material.

(2) The method of claim 1 wherein the step of adding sulfur to said porous base material is carried out by heating said porous base material in an atmosphere including sulfur compound at a temperature of 800°C~1700°C.

(3) The method of claim 2 wherein said sulfur compound is one type selected from SCl_2, S_2Cl_2 and $SOCl_2$.

(4) The method of claim 2 or 3 wherein said heating treatment is carried out in an atmosphere including a sulfur compound and CO.

(5) The method of claim 1 wherein the sulfur concentration added to said porous base material is 10ppb~1000ppm in said transparent glass body after the converting treatment which is subsequently carried out."

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